

**Solvay Chemicals, Green River**  
**December 2003, Environmental Report**

**Inspections:**

- ▶ Midwest Assistance Program, under contract to EPA, conducted a Sanitary Survey of our potable water system. No concerns were noted. This survey is done approximately once every three years.

**Permitting/Regulations:**

- ▶ CA-1&2 gas-to-coal permit application: We asked Detroit Stoker to adjust their NO<sub>x</sub> emission guarantee from 0.45 lb/MMBtu to the computer modeled result of 0.42. They are not willing to make that change based on the possibility of upset conditions. Submitted additional SNCR documentation and reemphasized Detroit's guarantee of 0.45 to WDEQ. Expect the permit to go to public comment by the end of January.
- ▶ CA-4 permit application to increase the production rate to 325 tph: Additional information was requested by, and submitted to, WDEQ concerning the application. A BACT analysis for installing SNCR to control NO<sub>x</sub> determined that technology to be technically infeasible due to the lack an injection area with proper temperature for the ammonia/NO<sub>x</sub> reaction. To further justify that the Ambient Ozone Standard would not be exceeded, revised, lower VOC emission rates (based on stack test results) were submitted. Using these revised rates in the ozone formation calculation demonstrated the impact to be well below the ozone standard.

**Monitoring/Reporting:**

- ▶ Revised the environmental portion of the 5-year BLM plan to be included with the mine-related revisions for submittal to BLM.
- ▶ Continue to capture a total of about 30 gpm in Tailings Pond interceptor trench. During December, SW Sump recovered 11.9 gpm (down from 13.4), the SE recovered 2.0 gpm (up from 1.6), and the SE recovered 14.2 (November number not available due to malfunctioning meter during that month).
- ▶ There were two Environmental Reportables to Solvay America in December, bringing the total for the year to 19. One was a baghouse (BF-31, bottom of silos) blowing, the other was for availability below 95% of the Boiler #2 (BO-2) SO<sub>2</sub> monitor. There were two excursions leading to the SO<sub>2</sub> availability issue, one was a process upset that plugged the sample transport system, the other was a malfunctioning pump diaphragm in the.

- ▶ Both of the Solvay America reportables were also WDEQ reportables.
- ▶ There was one Environmental SIP hit during the month, the baghouse blowing.
- ▶ The average CEM compliance (including both opacity and gas monitors) for the 4<sup>th</sup> Quarter 2003 was 99.75%. CA-1&2 opacity was lowest at 99.02 %, and the highest was Boiler #1 SO<sub>2</sub> at 100.00%.
- ▶ The average CEM monitor availability (including both opacity and gas monitors) for the 4<sup>th</sup> Quarter 2003 was 98.96%. Boiler #2 was the lowest at 94.38%, with the second lowest being Boiler #2 NO<sub>x</sub> at 96.52%. Seven of the 11 monitors had virtually 100% availability, except for the required quarterly audits, which brings the availability down to between 99.95 and 99.98%.
- ▶ Collected semi-annual used oil samples for analysis to ensure compliance with specifications for burning on the coal.

Training/Meetings:

- ▶ Met with WDEQ-Land Quality Division in Lander to discuss the Annual Report. Reviewed competitor's Annual Land Quality Reports after the meeting.

Other:

- ▶ Met with Solvay Chemicals' HSE Managers in Houston. Agreed on a goal to reduce Environmental Reportables by 20% during 2004 over the 2003 statistics. (2003 reportables of 19; 2004 goal of 15 or less.)
- ▶ Discovered that CA-1&2 opacity excursions during cold weather to be related to the mine heat system. The system has been adjusted to avoid it in the future.